

WHAT IS CLAIMED IS:

Subj. 1. A subscriber unit for performing radio communication at a fixed location, comprising:

5 radio base station detecting means for detecting, in a continuous receive mode, radio base stations from which radio wave can be received;

10 area number recognizing means for recognizing an area number of radio base stations of which location registration is permitted;

radio base station extracting means for extracting radio base stations with said area number from among the detected radio base stations; and

15 synchronization control means for establishing synchronicity with a radio base station of highest reception level among the extracted radio base stations.

2. The subscriber unit according to claim 1, wherein said radio base station detecting means detects 20 identification numbers of radio base stations from which radio wave can be received.

3. The subscriber unit according to claim 1, wherein said area number recognizing means makes a location 25 registration request to the detected radio base stations, judges a radio base station denying the location registration request to be outside area, judges a radio base

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station accepting the location registration request to be inside area, and recognizes an area number of the radio base station which has accepted the location registration request.

5 4. The subscriber unit according to claim 1, wherein said area number recognizing means stores the area number and identification numbers of radio base stations in a nonvolatile memory.

10 5. The subscriber unit according to claim 1, wherein, when mode is switched to the continuous receive mode after the recognition of the area number by said area number recognizing means, said radio base station extracting means extracts radio base stations with the already 15 recognized area number from among radio base stations newly detected by said radio base station detecting means.

20 6. The subscriber unit according to claim 1, wherein said synchronization control means maintains synchronicity with a radio base station of highest reception level among the radio base stations detected by said radio base station detecting means before establishing synchronicity with the radio base station of which location registration is permitted and of which reception level is 25 highest.

7. The subscriber unit according to claim 1,

further comprising timer control means for starting a timer when there exists no radio base station of which location registration is permitted.

5 8. The subscriber unit according to claim 7,
wherein said synchronization control means maintains
synchroneity with a radio base station of highest reception
level among the detected radio base stations until the timer
signals time-out.

10 9. The subscriber unit according to claim 1,
further comprising area number change control means for
controlling change of the area number recognized by said
area number recognizing means upon recognition of change of
15 the area number.

10. A radio base station recognition method which
enables a subscriber unit for performing radio communication
at a fixed location to recognize a radio base station,
20 comprising:

detecting, in a continuous receive mode, radio base stations from which radio wave can be received;

recognizing an area number of radio base stations
of which location registration is permitted;

25 extracting radio base stations with said area
number from among the detected radio base stations; and
establishing synchronicity with a radio base

station of highest reception level among the extracted radio
base stations

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